Aircrew Incident Reporting System (AIRS)

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Airbus Industrie

Third GAIN World Conference

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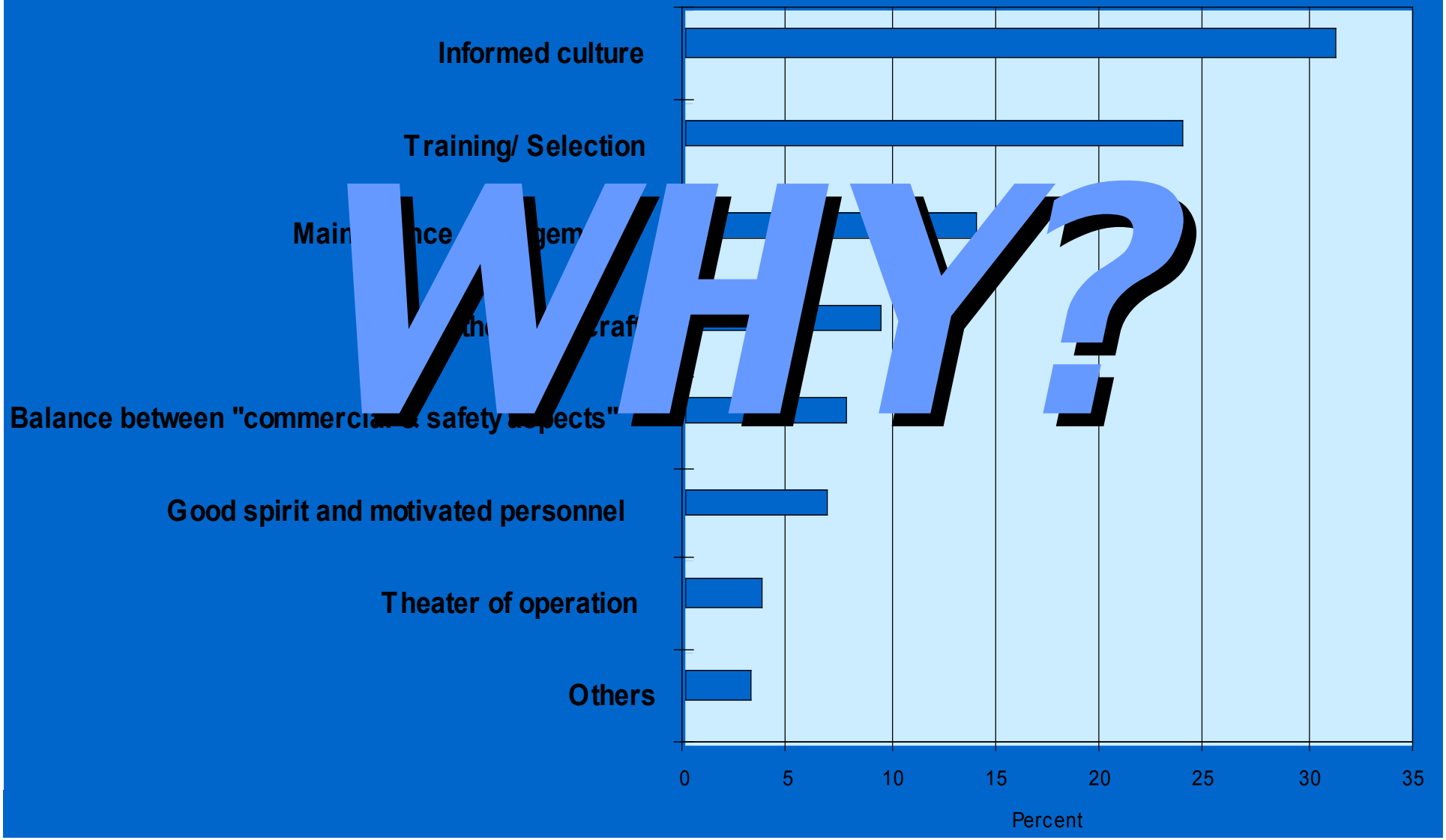
Long Beach Hilton

Long Beach, California

Structure of the Presentation

- Key Elements of a "Safe Airline"
- What is AIRS?
- Lessons from AIRS
  - Internal Sharing
  - External Sharing
- Conclusion

Key Elements of a "Safe Airline"



WHY?

Today's Return of Experience

Structure of the Presentation

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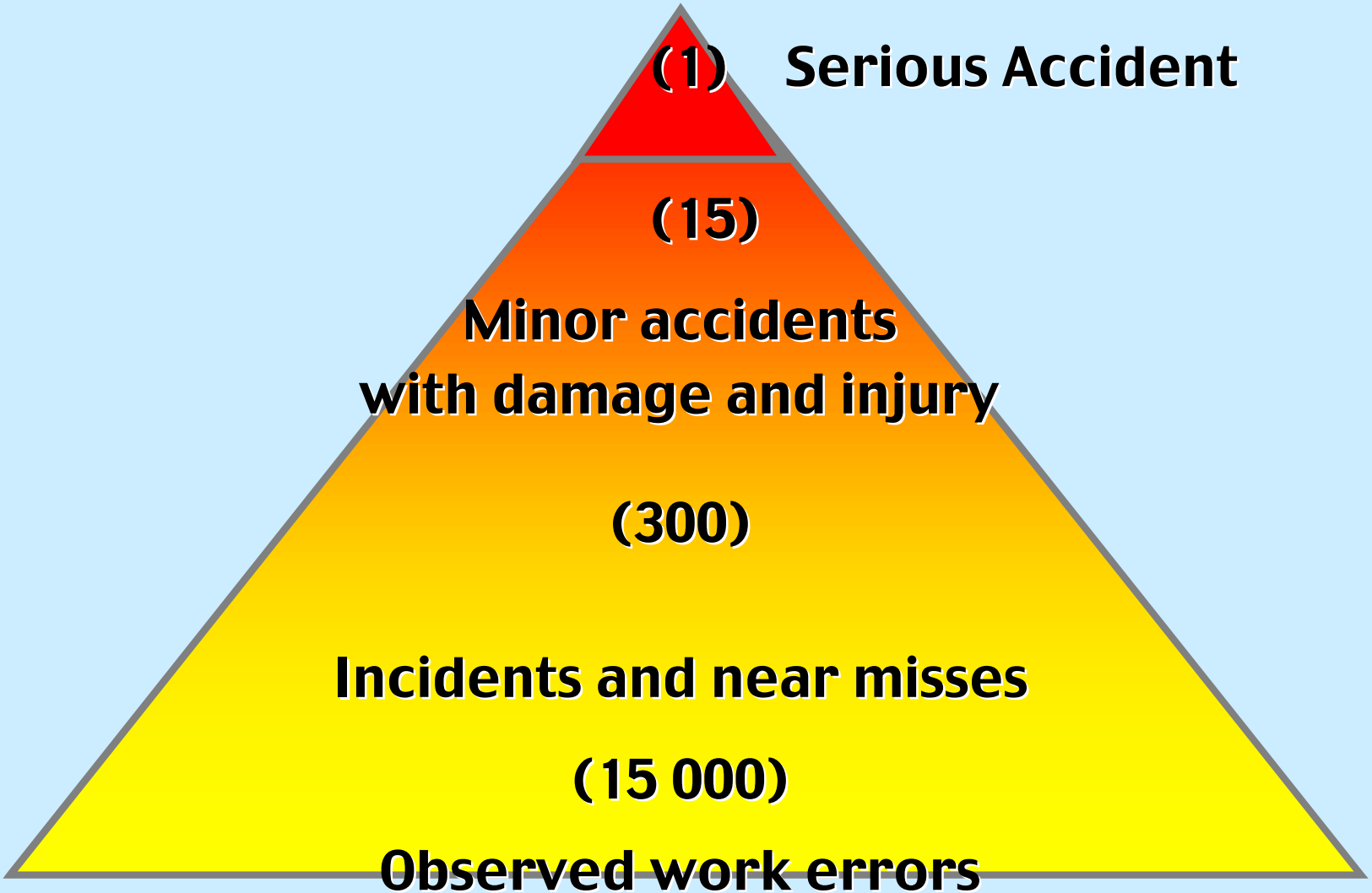
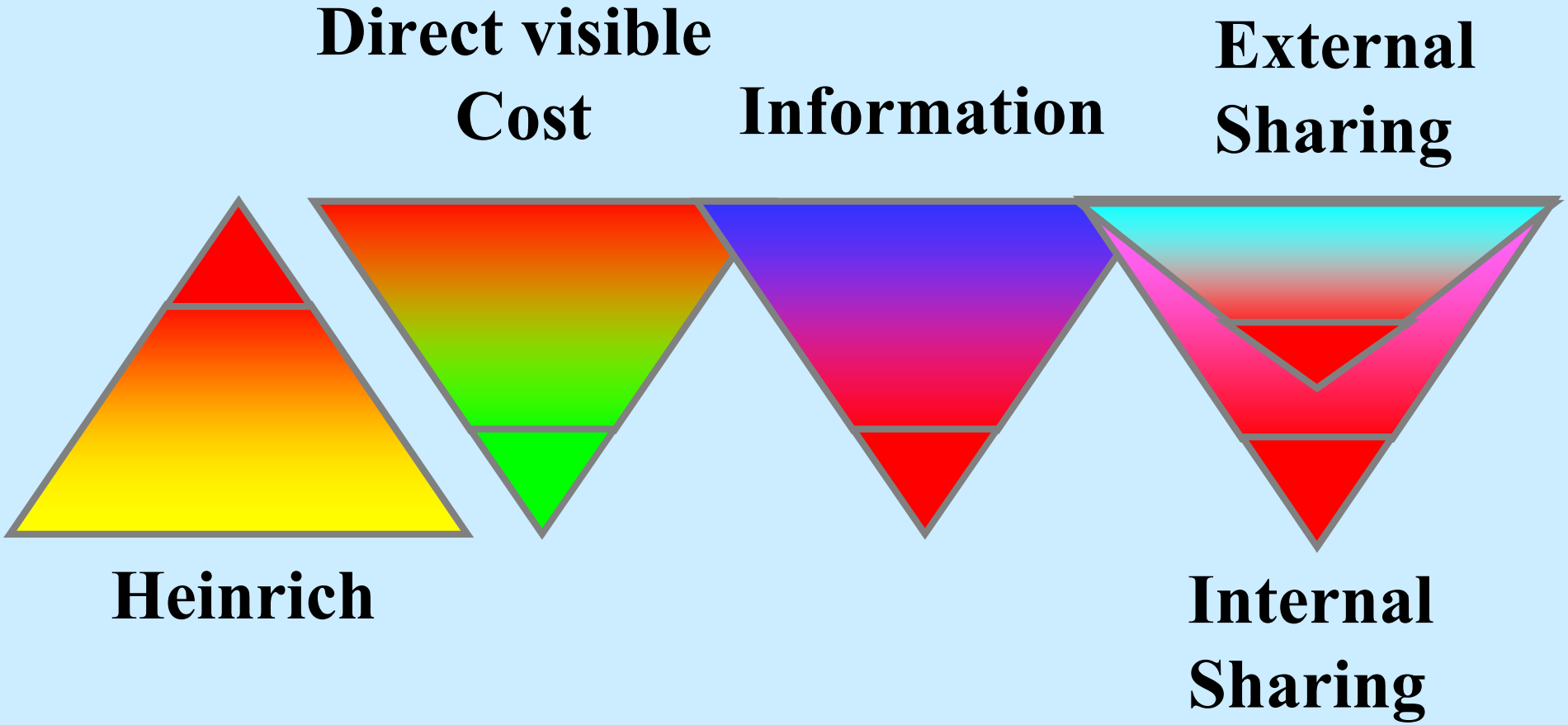
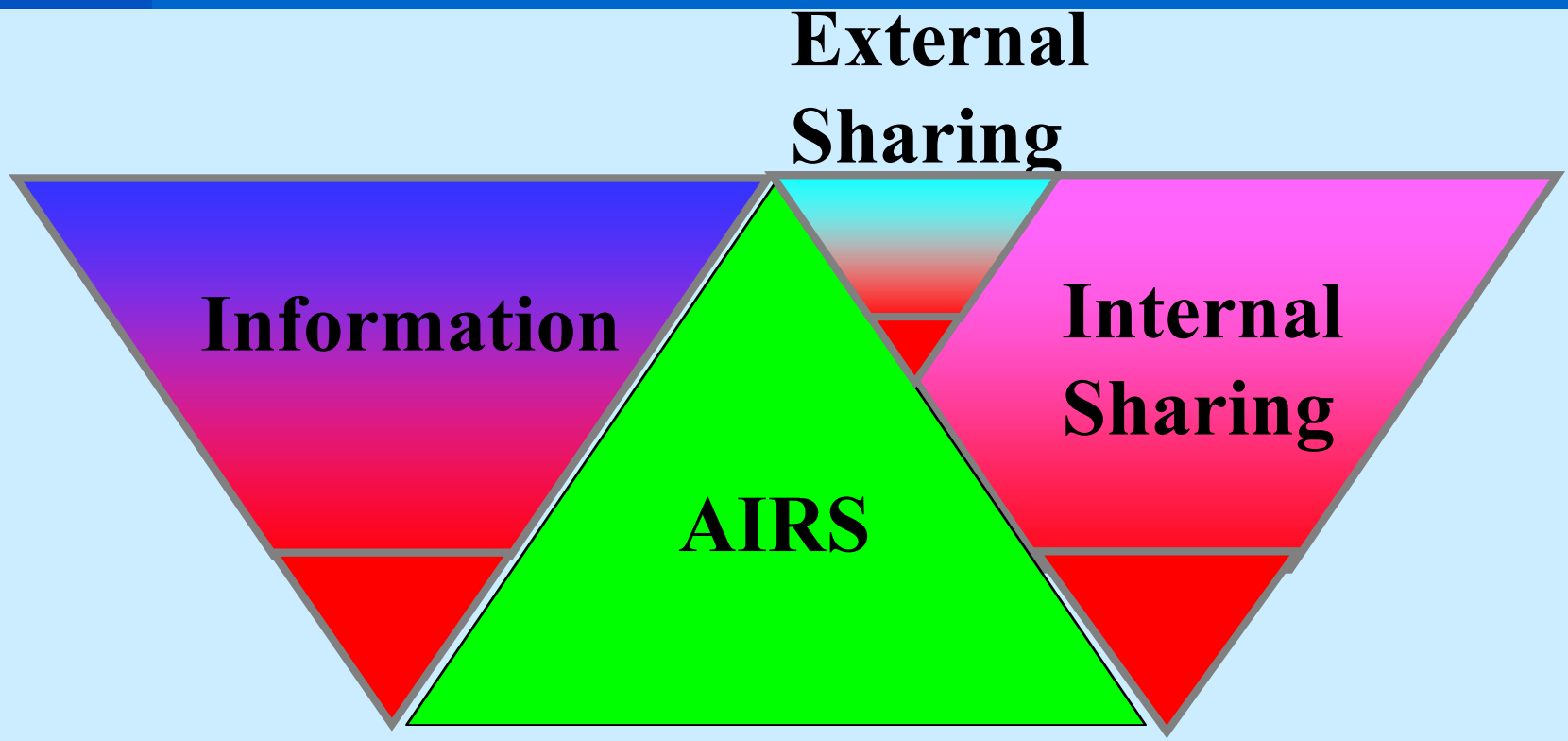
Heinrich Pyramid



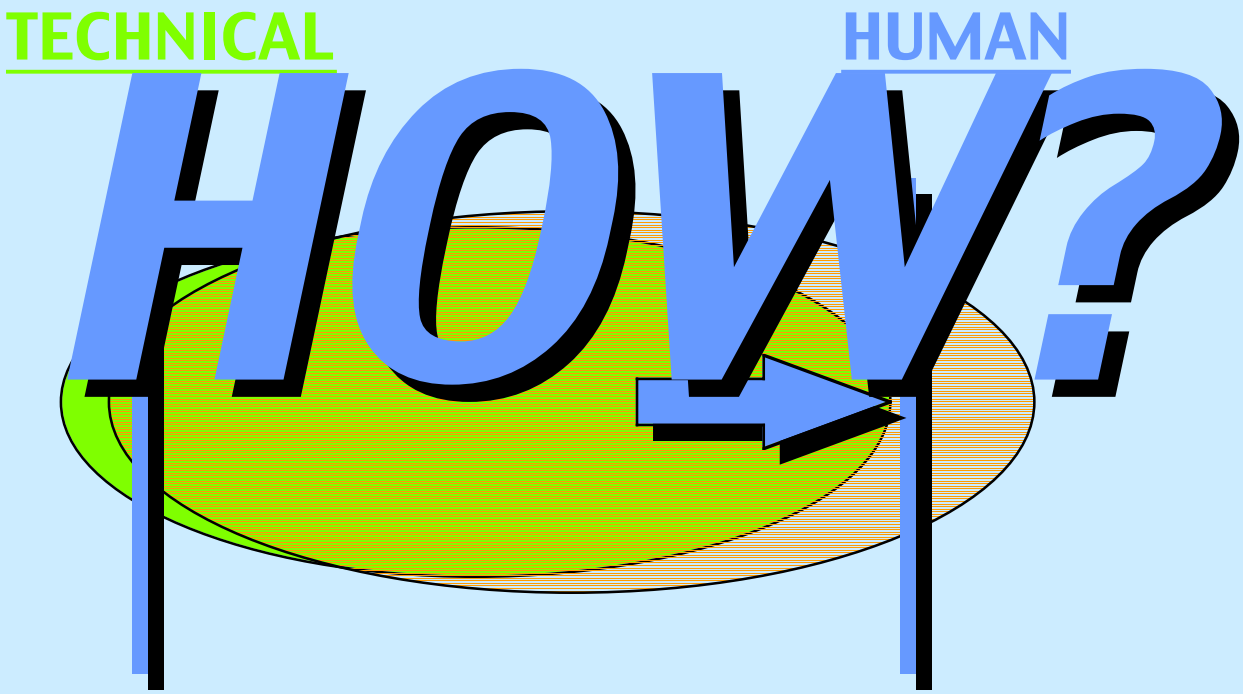
Beyond Heinrich



Aim of AIRS



Operational Incidents



AIRS Working Procedure

FLEET CO–
ORDINATOR

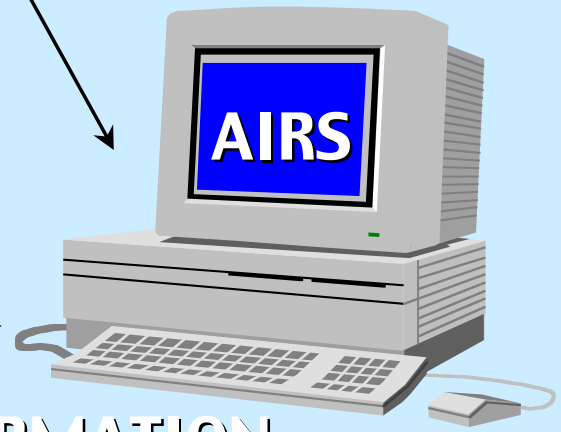
NARRATIVE
REPORT

DE–
IDENTIFICATION

AIRS
Human Factors Questionnaire
Identification Slip

Reporting Form

DATA



INFORMATION

AIRS Users & Imminent Users

BRITISH AIRWAYS
SABENA
AUSTRIAN AIRLINES
HAPAG LLOYD
AIR FRANCE
US AIRLINES
CATHAY PACIFIC
TAM
ALITALIA
AIR CANADA
BRITISH MIDLANDS

EMIRATES
QATAR
EGYPT AIR

AIRTOURS
ACES
IBERIA
JAS
MONARCH
...

Structure of the Presentation

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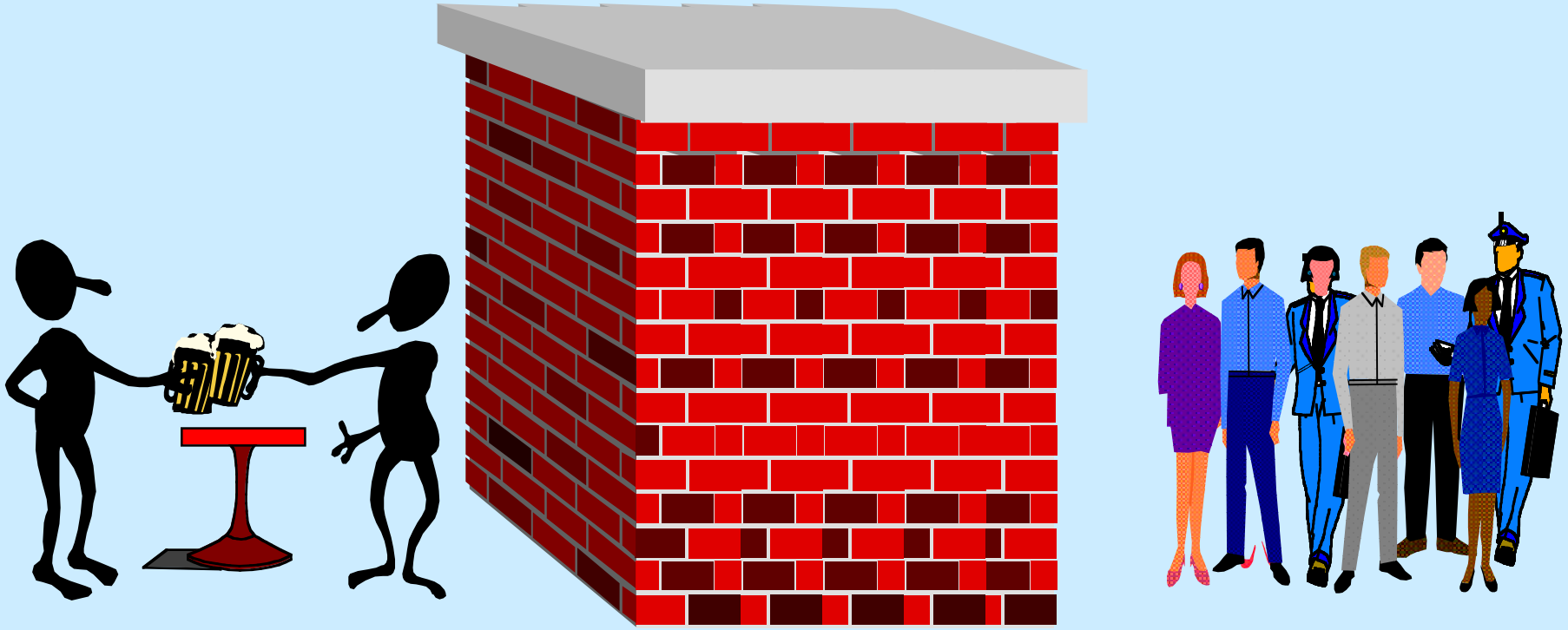
Barriers to Sharing

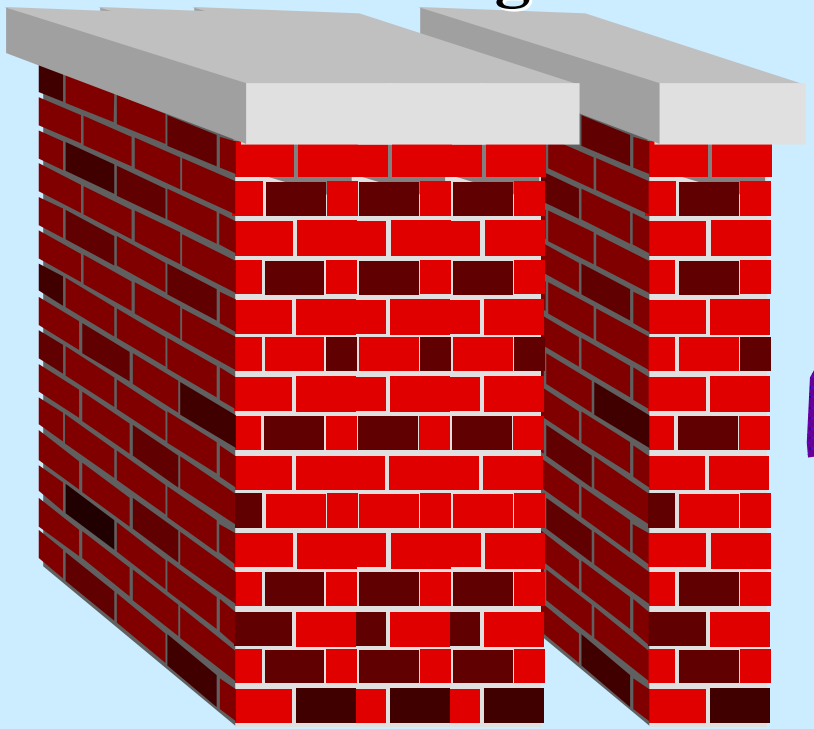


Front Line

Airline

Barriers to Sharing

Legislation

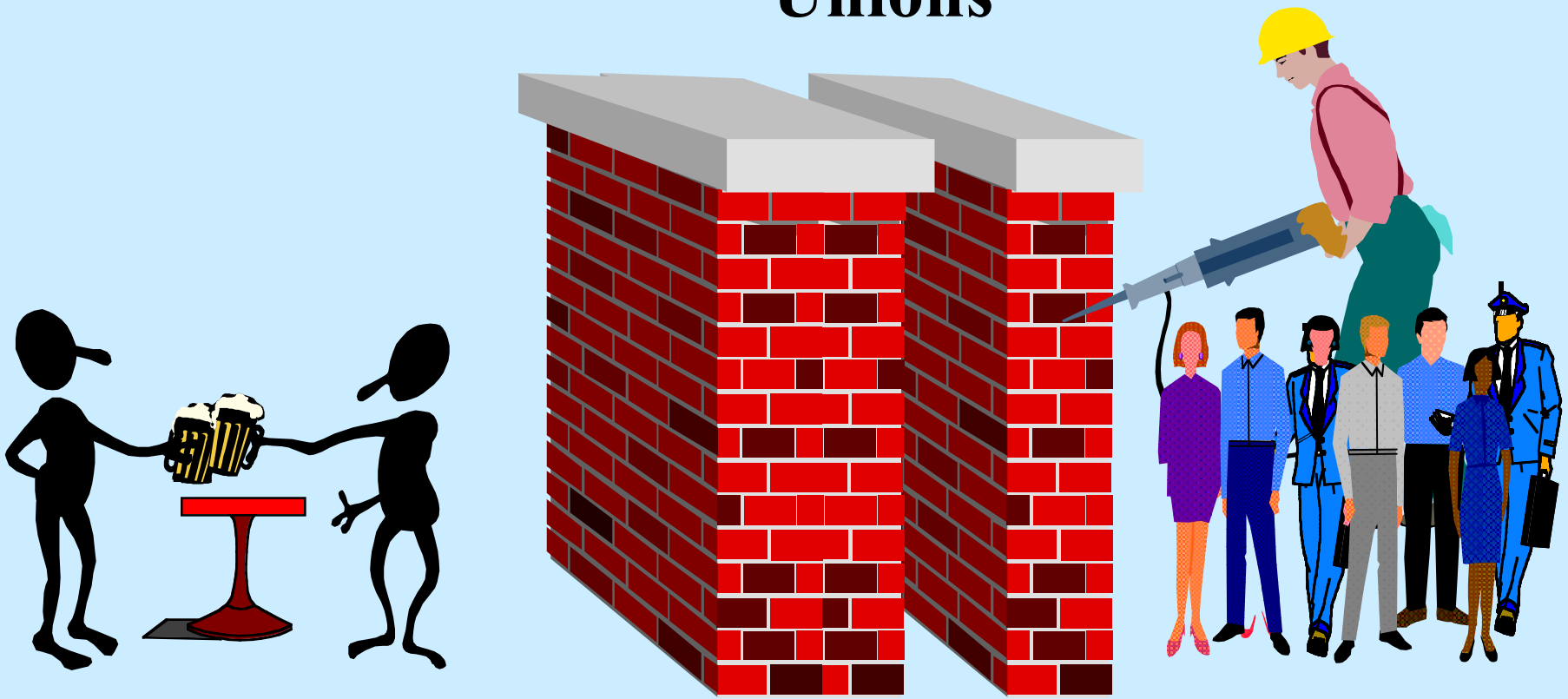


Front Line

Airline

Barriers to Sharing

Unions

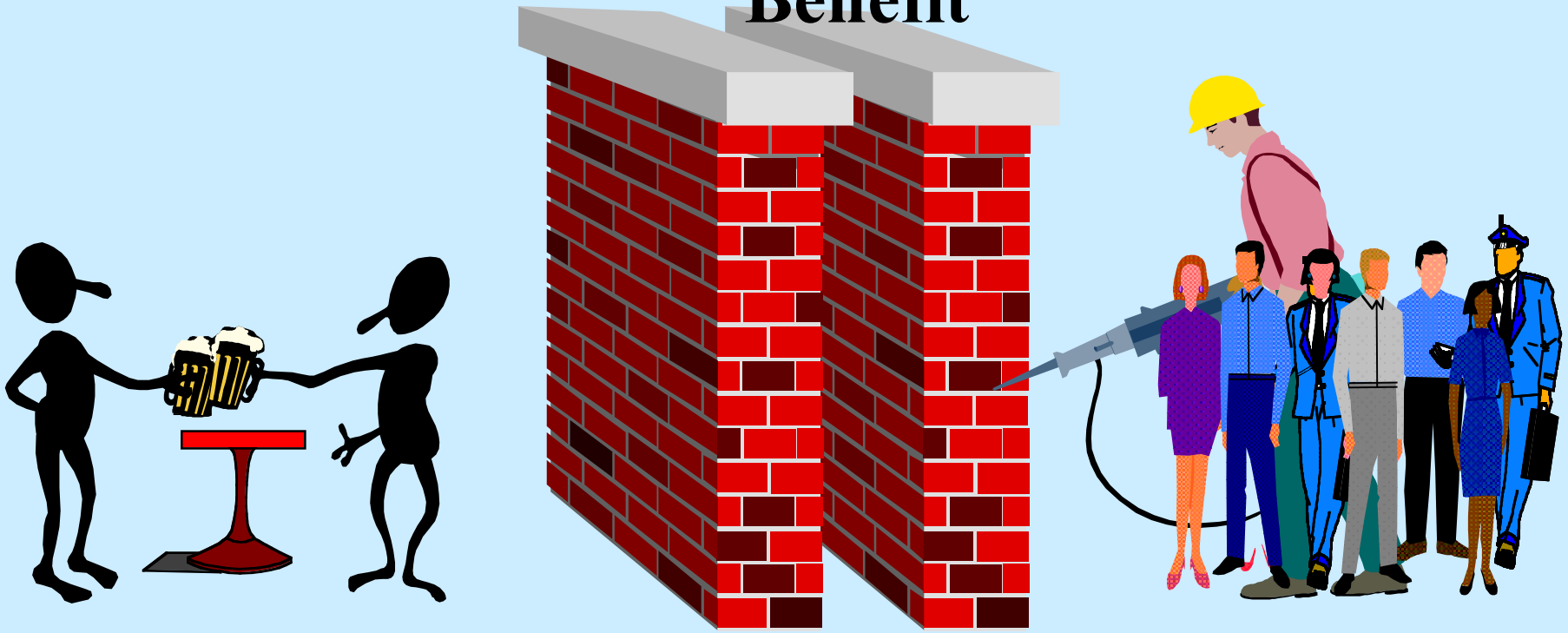


Front Line

Airline

Barriers to Sharing

Cost/ Benefit

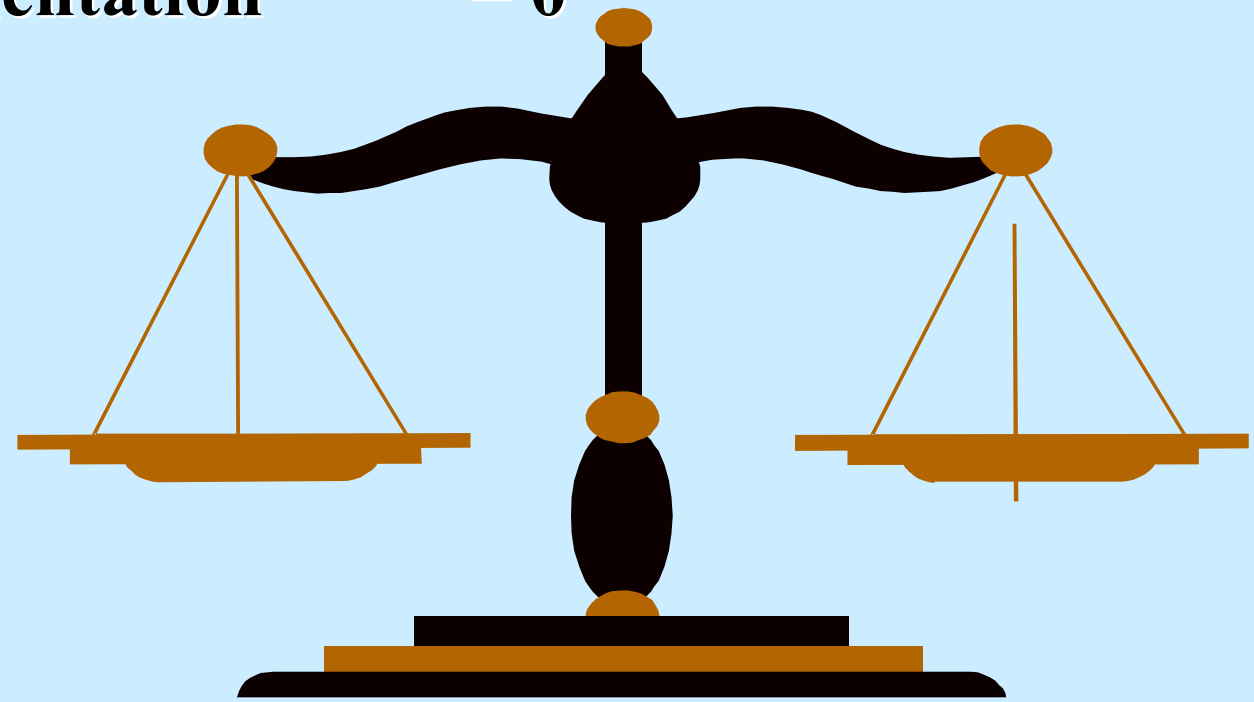


Front Line

Airline

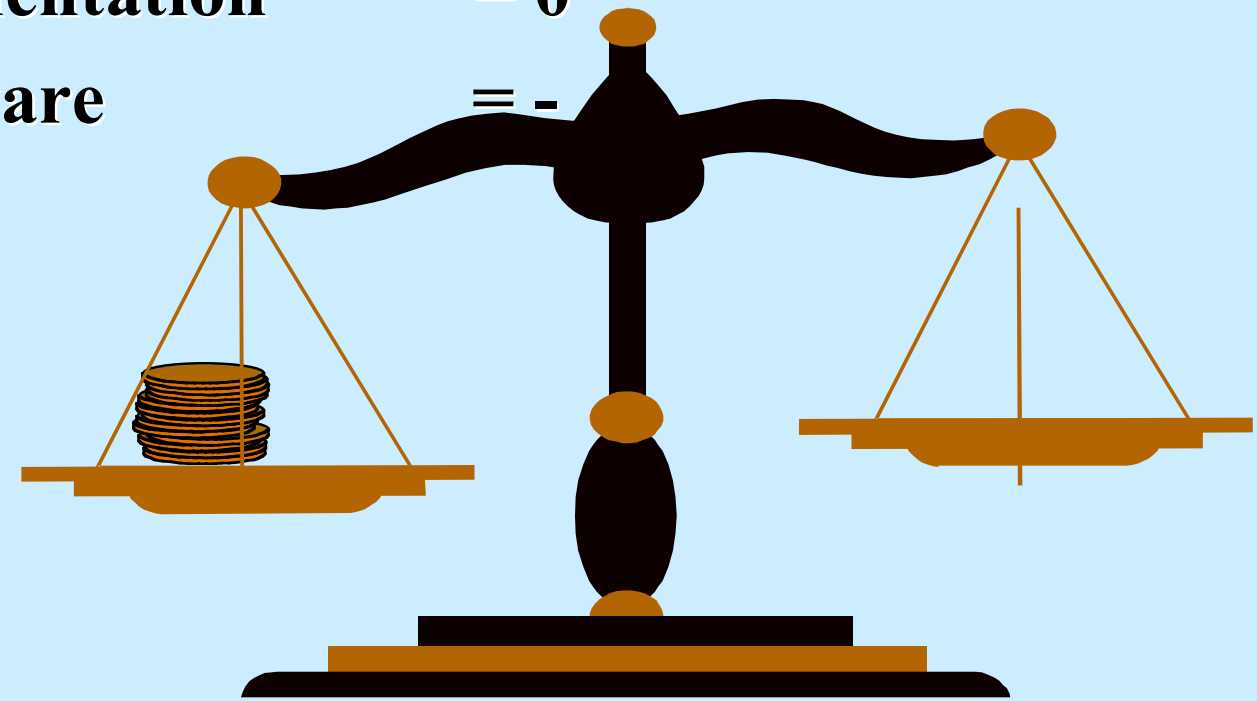
Cost Benefits

- **Safety Culture = ?**
- **Training = 0**
- **Software (AIB) = 0**
- **Documentation = 0**



Cost Benefits

- **Safety Culture = 0**
- **Training = 0**
- **Software (AIB) = 0**
- **Documentation = 0**
- **Hardware = -**



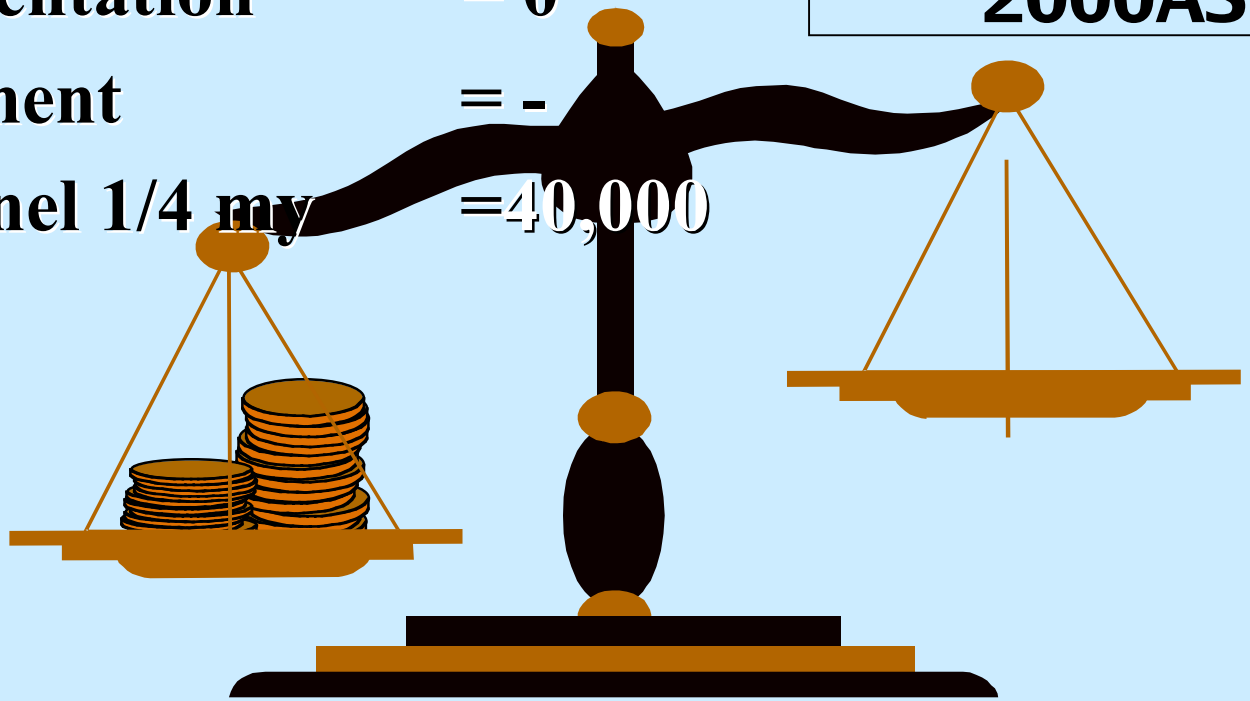
Cost

- Safety Culture = 0
- Training = 0
- Software (AIB) = 0
- Documentation = 0
- Equipment = -
- Personnel 1/4 my =40,000

Benefits

Airline with 100 Aircraft

700 HFR/ 2000ASR

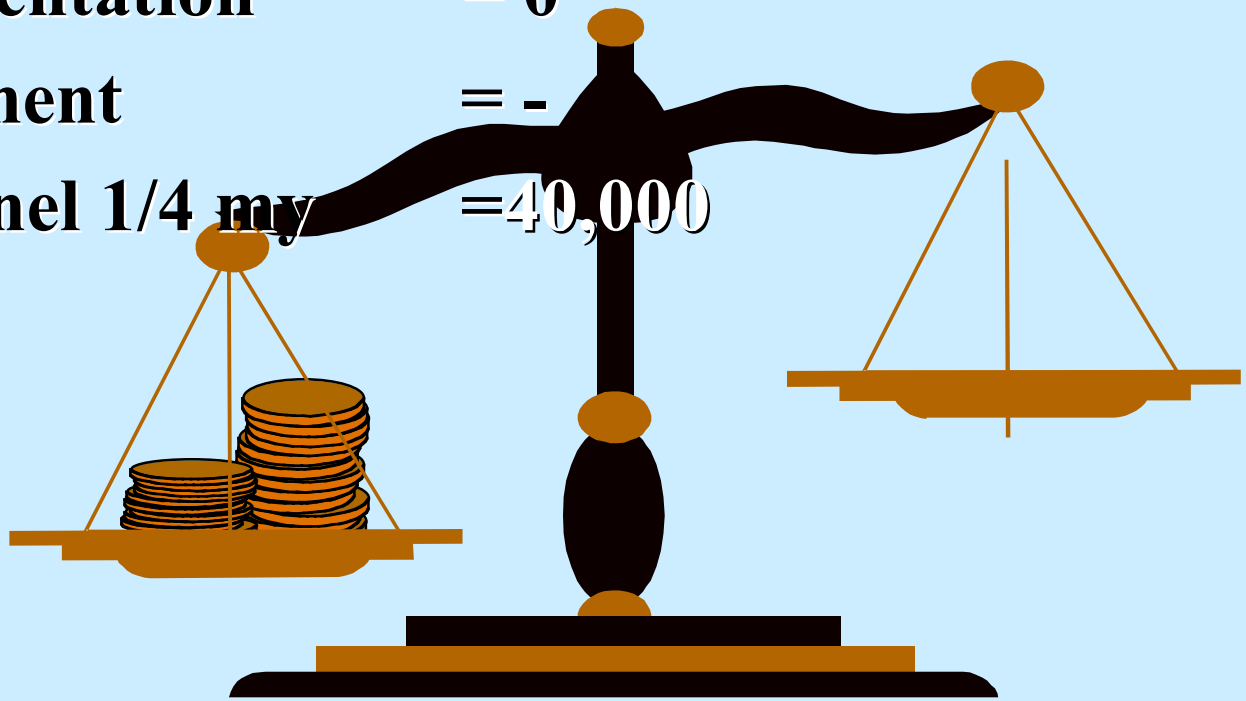


Cost

- **Safety Culture = 0**
- **Training = 0**
- **Software (AIB) = 0**
- **Documentation = 0**
- **Equipment = -**
- **Personnel 1/4 my =40,000**

Benefits

- **Break error chains, why's**

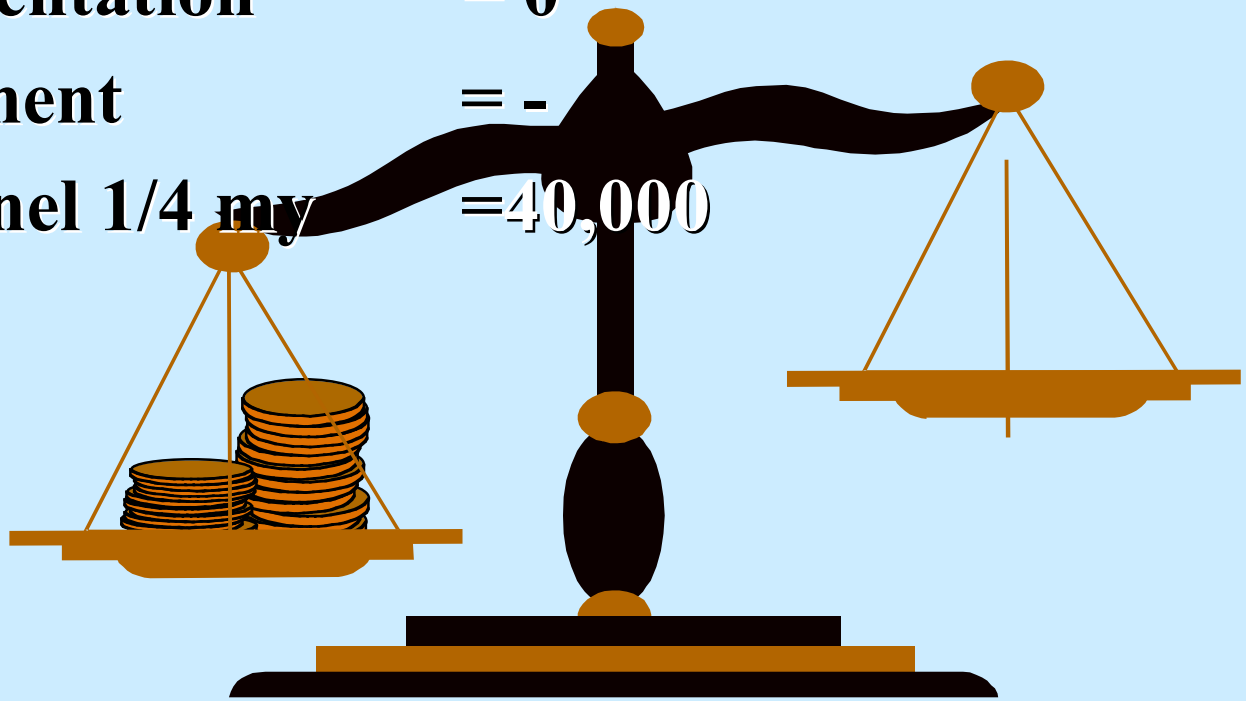


Cost

- **Safety Culture = 0**
- **Training = 0**
- **Software (AIB) = 0**
- **Documentation = 0**
- **Equipment = -**
- **Personnel 1/4 my =40,000**

Benefits

- **Break error chains, why's**
- **Improve documentation, procedures and training**

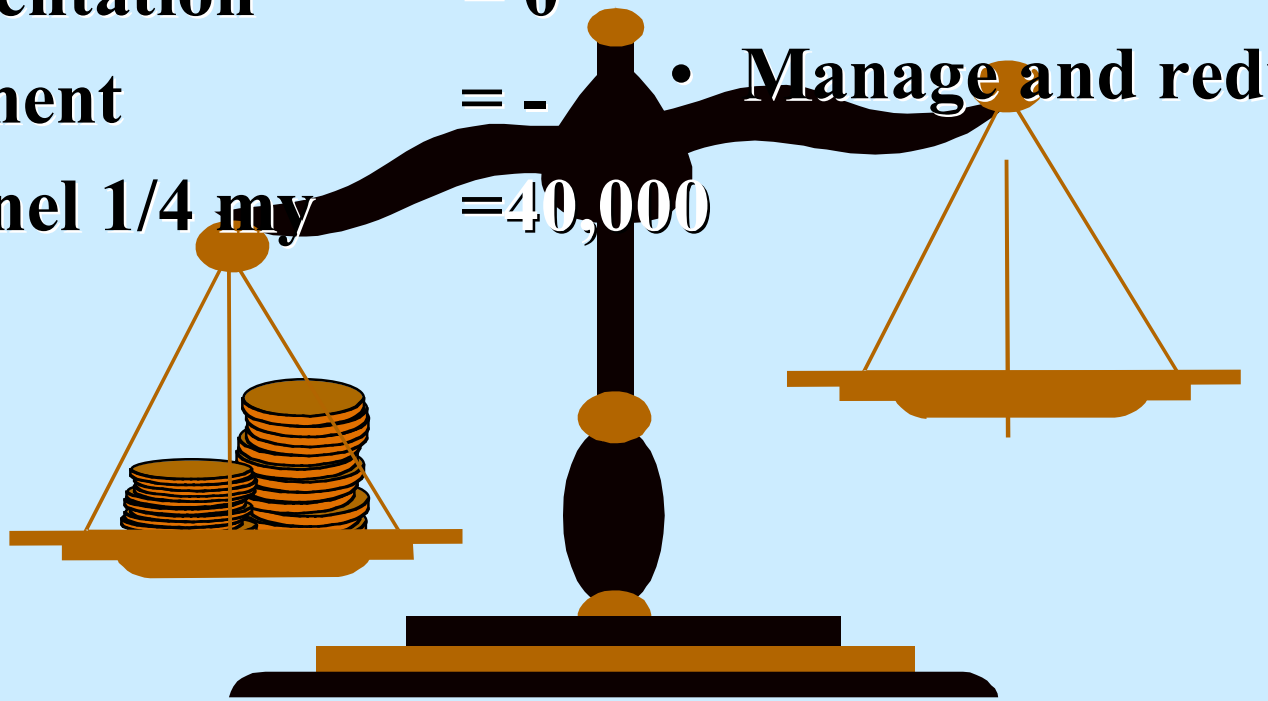


Cost

- Safety Culture = 0
- Training = 0
- Software (AIB) = 0
- Documentation = 0
- Equipment = -
- Personnel 1/4 my =40,000

Benefits

- Break error chains, why's
- Improve documentation, procedures and training
- Manage and reduce risk



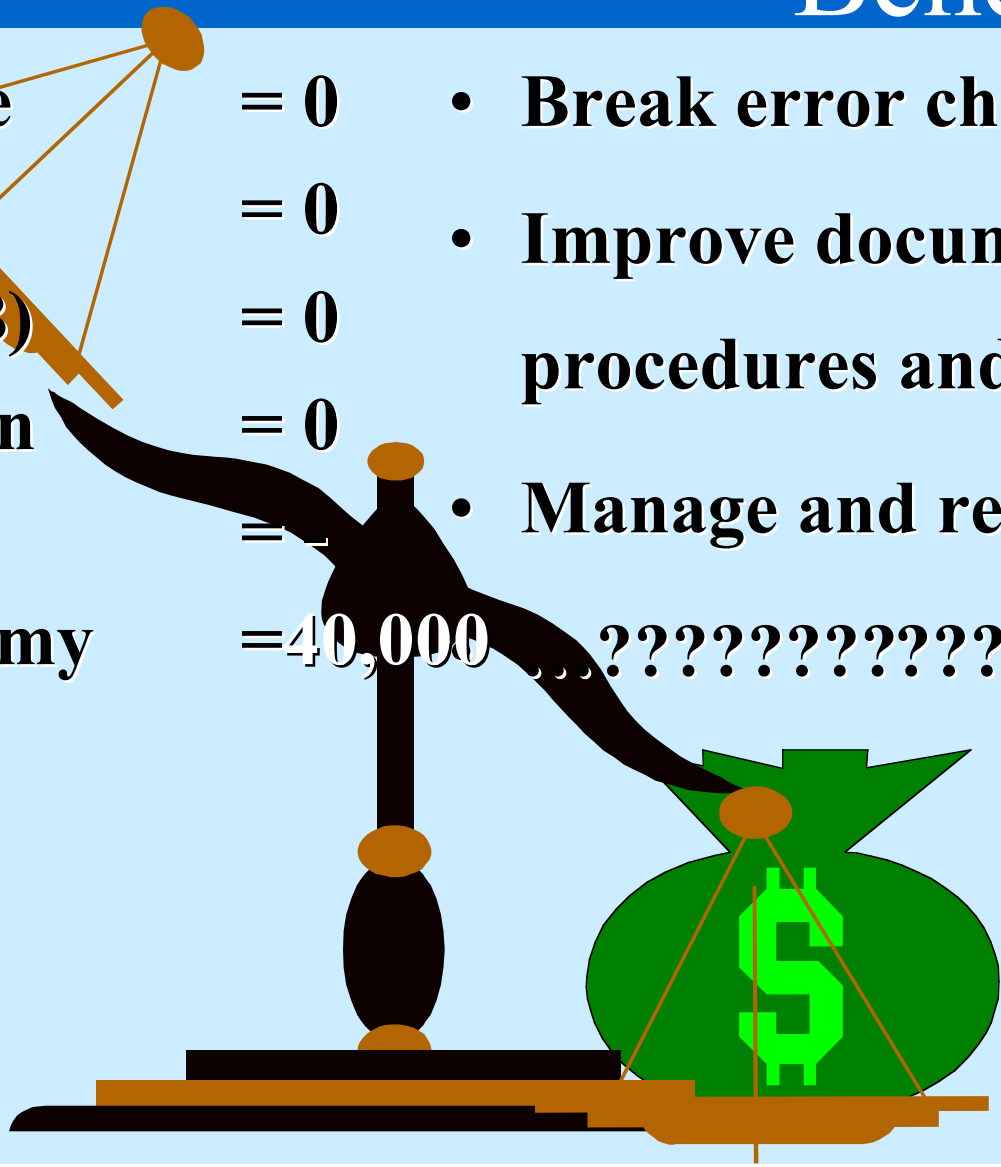
Cost

- **Safety Culture = 0**
- **Training = 0**
- **Software (AIB) = 0**
- **Documentation = 0**
- **Equipment = [illegible]**
- **Personnel 1/4 my =40,000 . . .**

Benefits

- **Break error chains, why's**
- **Improve documentation, procedures and training**
- **Manage and reduce risk**

. . . ??????????????????



Accidents and Associated Cost

Covered Cost	Coverage	Typical Cost	Max. Value
Aircraft physical damage	Insurance	50 US$ 145 M US $	
Liability claims	Insurance	1–3 M US$ (per l.o.l)	521 M US$
Search & Rescue	Insurance	.8 M US$	1 M US$
Recovery & Investigation	Tax payer	5 M US$	100 M US$
Accident cleanup	Insurance		3

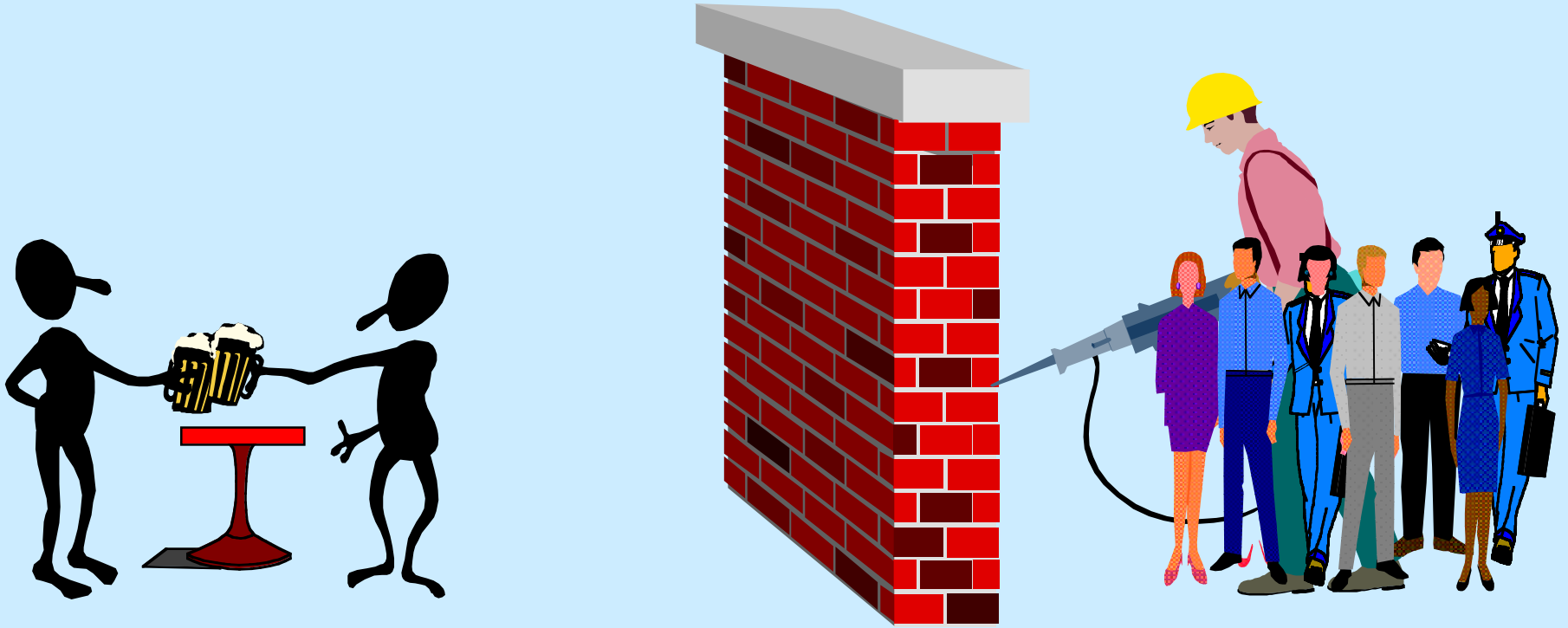
Accidents and Associated Cost

Non Covered conditions	Typical cost	Time to re-establish pre-event Cost
Aircraft loss of use	1 M US$/ month	
Increase in insurance p.	34 M US$ *	3–5 years*
Marketing of disaster	440 M US$ (case by case)	1/2 – 1 year (case by case)

**If liability claim is >400 M US$ premiums are likely to double by next renewal (Airline with average safety*

Barriers to Sharing

Confidentiality/
Motivation

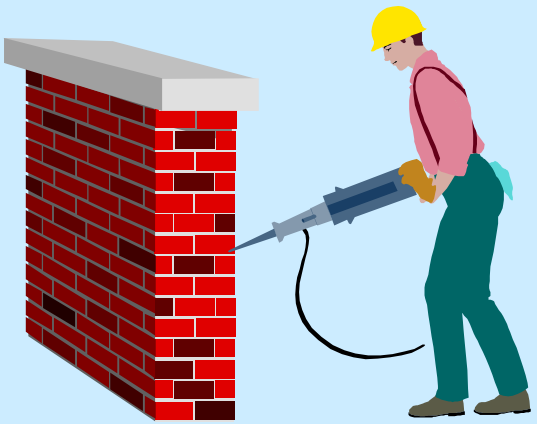


Front Line

Airline

Confidentiality/ Motivation

- **Protection against reporters**
  (except in case of contravention's with National Law or Gross Negligence)
  - **Disciplinary proceedings (BMA)**

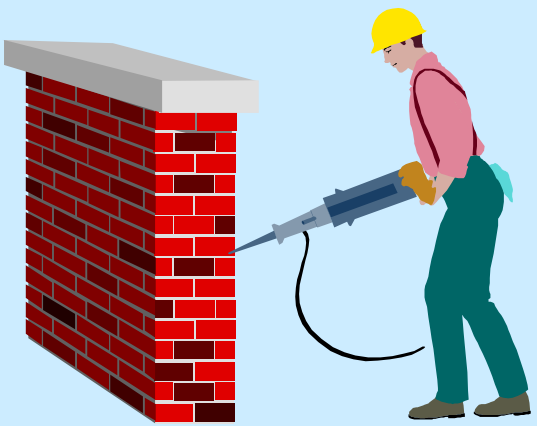


Disciplinary Proceedings

“British Midlands considers flight safety to be fundamental to the development of our business and is commited to strengthening our safety culture by encouraging the partnership between management and staff. We actively encourage the reporting of all accidents, incidents and events that affect flight safety and will not institute disciplinary proceedings when they result from errors.”

Austin Red

Confidentiality/ Motivation



- **Protection against reporters**
  (except in case of contravention's with National Law or Gross Negligence)
  - **Disciplinary proceedings (BMA)**
  - **Vertrauens Pilot (AUA)**
- **Marketing**
- **The 4 R's**
  - **Recognition, - Responsibility**
  - **Reward, - Respect**

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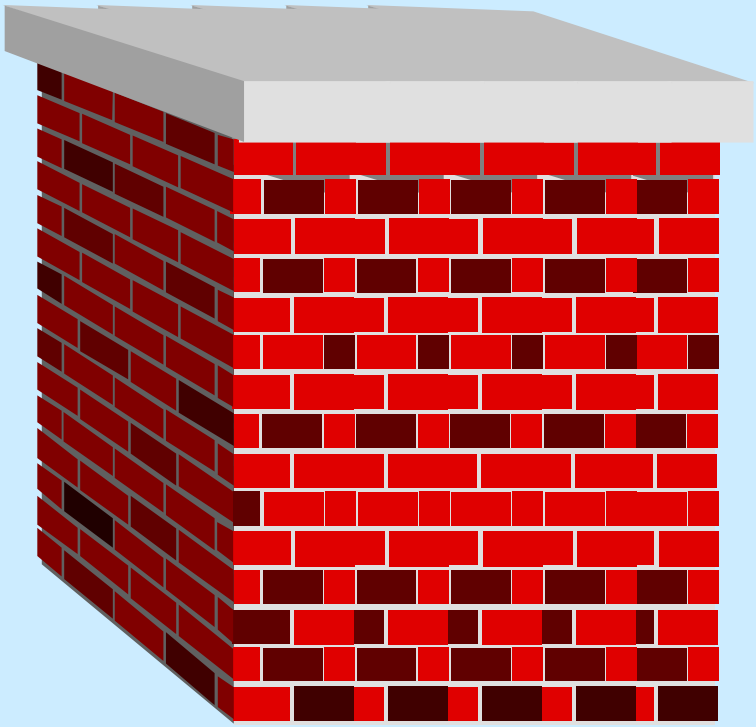
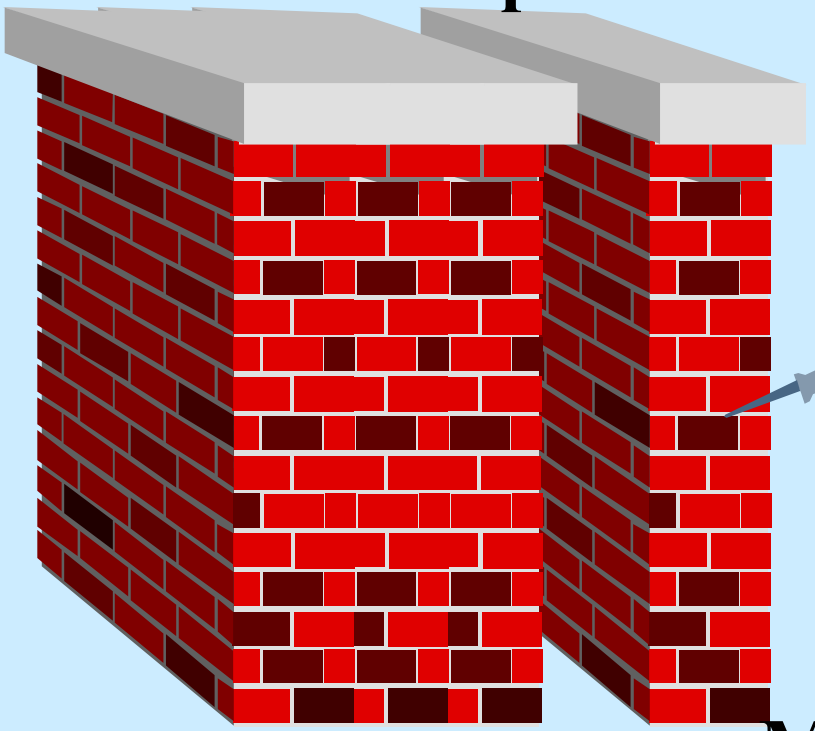


Manufacturer

GAIN

Barriers to Sharing

Confidentiality/
Data protection



Airline

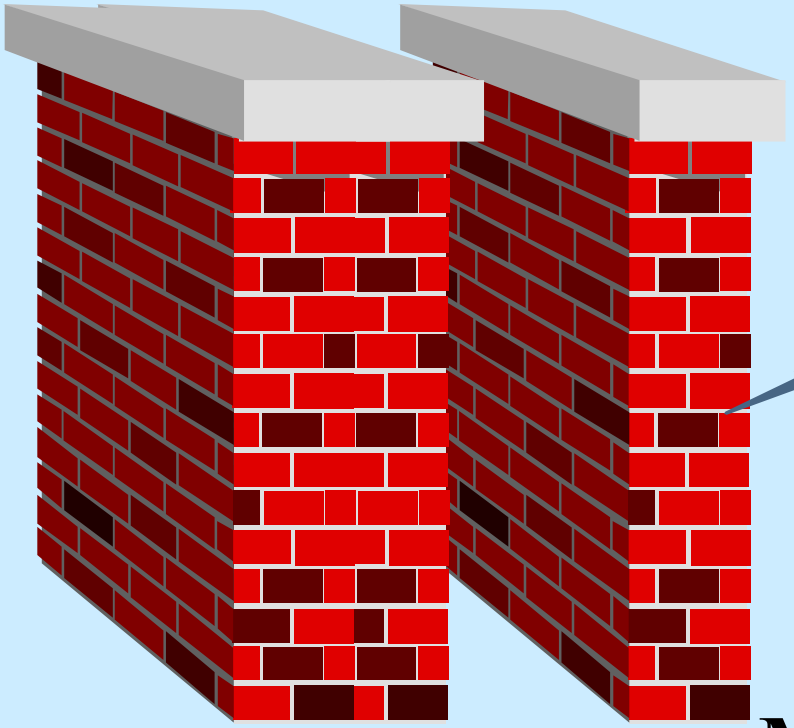
Manufacturer
GAIN

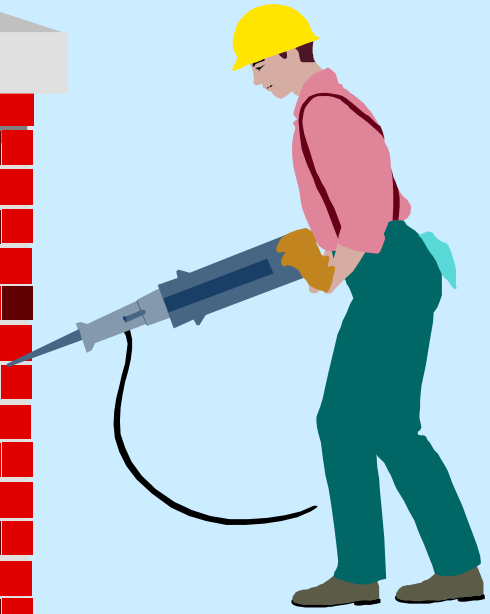
Confidentiality/ Data protection

- Limited access and highest level of confidentiality.
- Sufficient de-identification.

Barriers to Sharing

Data Provision





Airline

Manufacturer

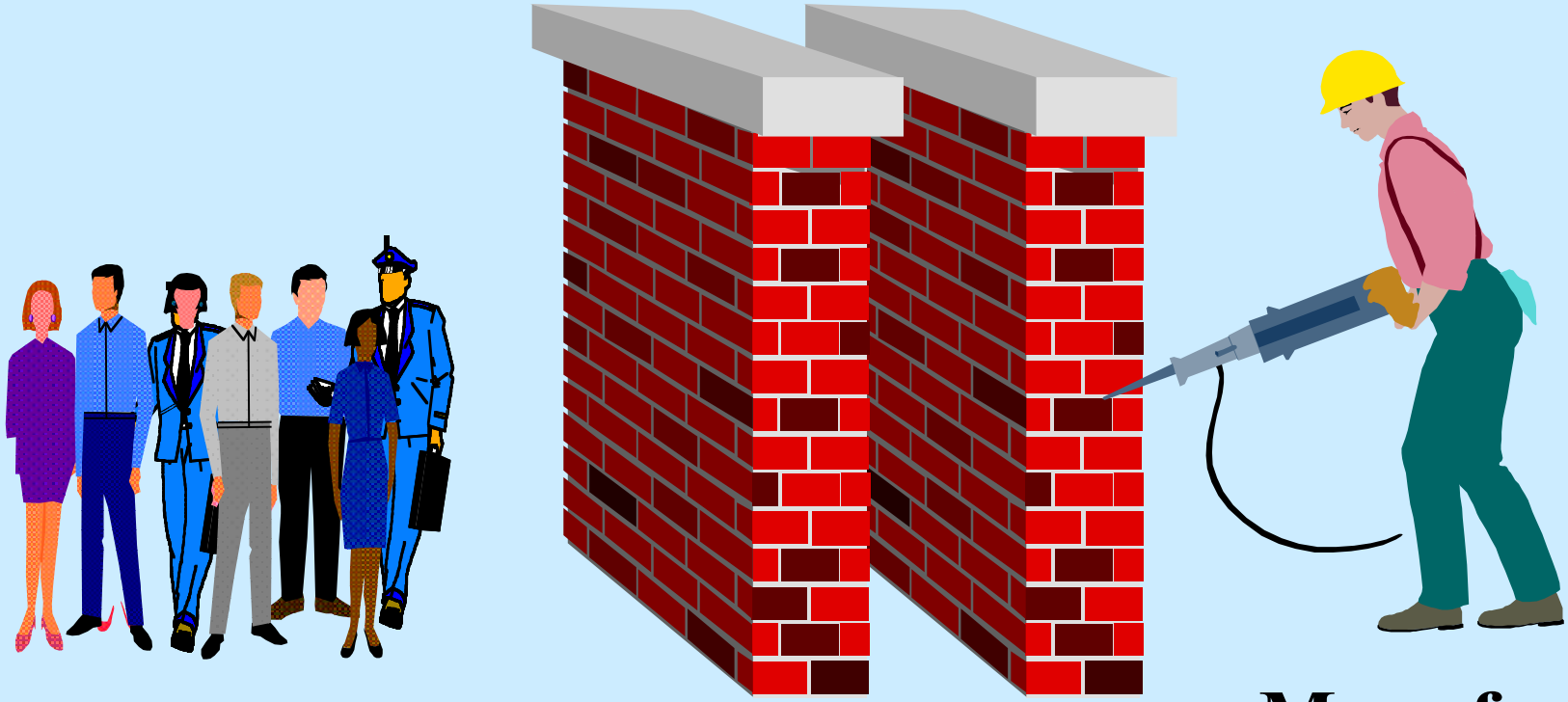
GAIN

Data Provision

- Provision of results not raw data
- No commitment to on-going provision of data

Barriers to Sharing

Legal Aspects



Airline

Manufacturer

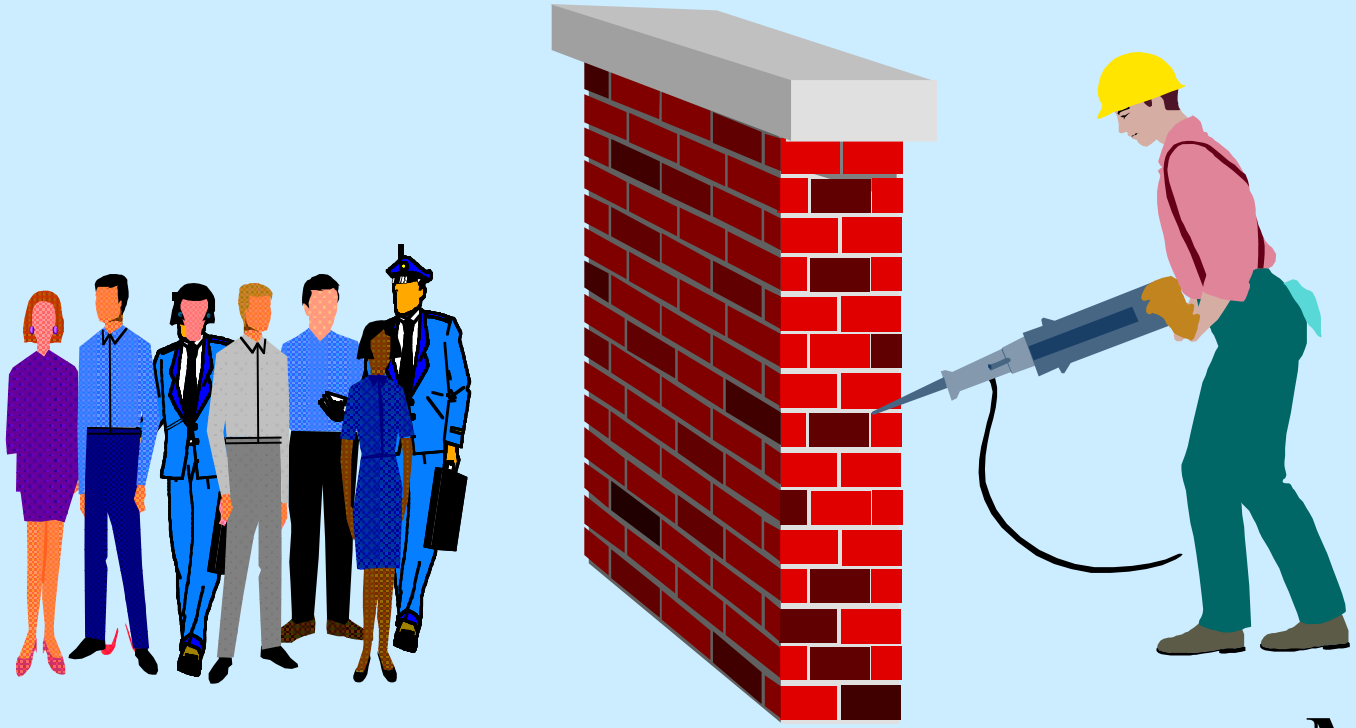
GAIN

Legal Aspects

- Airline incurs no liability.
- Need of existing legal entity.
- Data provision agreement.

Barriers to Sharing

Data Utilisation



Airline

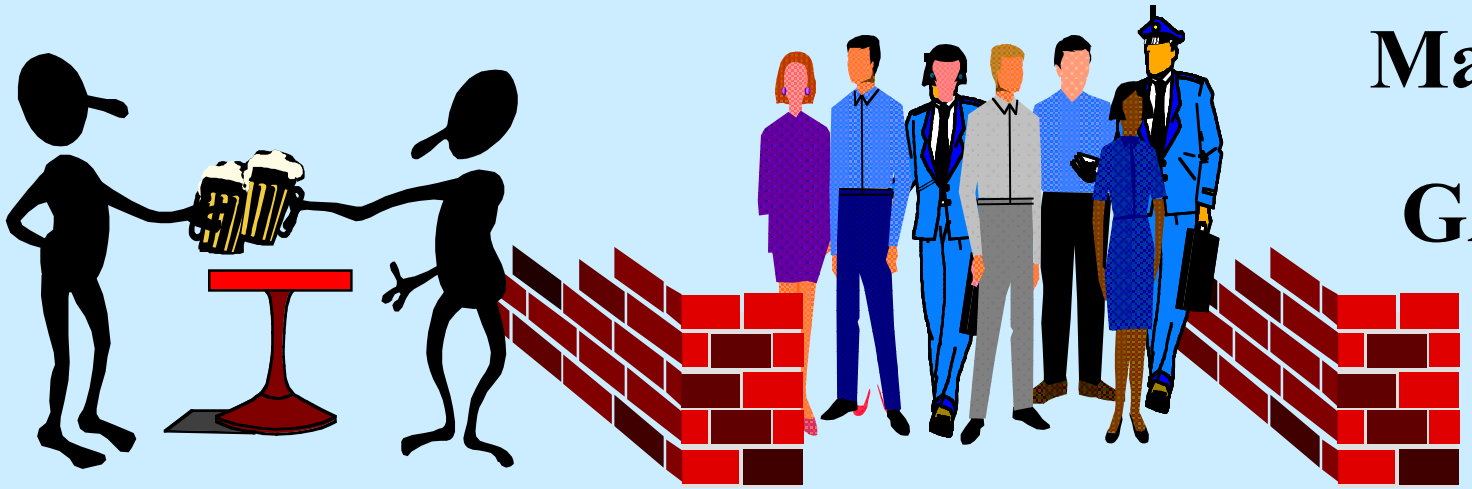
Manufacturer

GAIN

Data Utilisation

- Respond and advise airline appropriately to issues raised by data.

Barriers to Sharing



Manufacturer

GAIN

Front Line

Airline

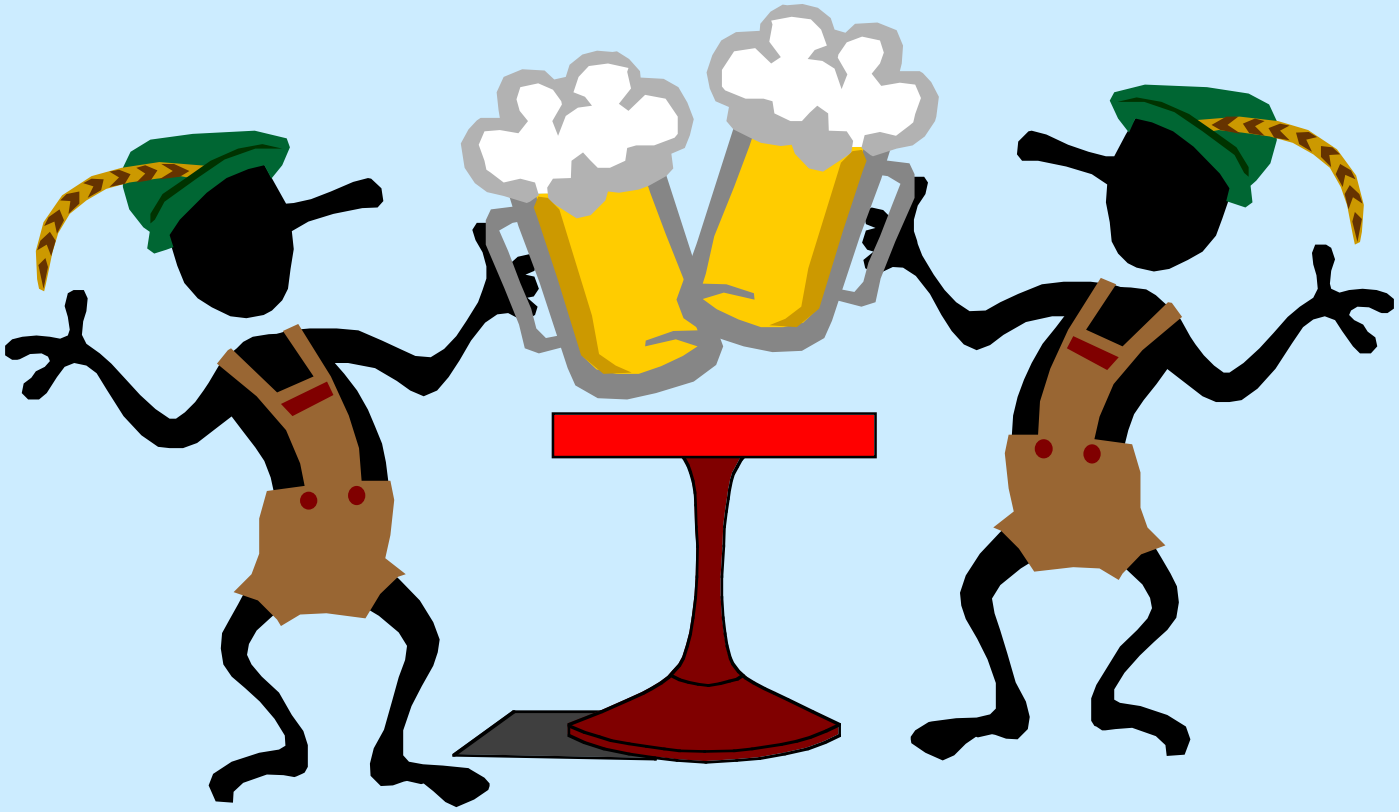
Conclusion

If one AIRS programs could just avoid

one hull loss killing 100 people*,

AIRS operating costs for 400 airlines

operating 100 aircraft

would be covered

for around 25 years!